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September 30, 2011  
TRC Solutions Project No. 182978

Mr. Gary Moore  
U.S. EPA Region 6  
1445 Ross Avenue, Suite 1200  
Dallas, TX 75202-2733

**Re: Weekly Progress Report  
Falcon Refinery Superfund Site  
Ingleside, San Patricio County, Texas  
TXD 086 278 058**

Dear Mr. Moore:

On behalf of the National Oil Recovery Corporation (NORCO), TRC Solutions (TRC) submits this Weekly Progress Report on the Removal Action Activities at the Falcon Refinery Federal Superfund Site to the United States Environmental Protection Agency for your review.

If you have any questions, comments, or concerns, please do not hesitate to contact me at (512) 699-9931.

Sincerely,  
TRC

Alonzo G. Arredondo  
Senior Geologist

Attachment: Weekly Progress Report  
cc: National Oil Recovery Corporation



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## **WEEKLY PROGRESS REPORT - Falcon Refinery Federal Superfund Site, Ingleside, TX;**

### **1. COMPLETED PROJECT ACTIVITIES TO DATE**

The project activities completed to date are listed below.

#### **A. Removal of Sludge and Demolition of Tanks**

Tanks completed to date are all located in the Area of Concern 1N (AOC 1N) which is in the NW portion of the Falcon Refinery. AOC 1N is located on the property which lies north-west of the intersection of FM 2725 and Bishop Road in Ingleside, TX.

The activities completed for tanks listed below include the removal and transfer of tank bottoms into Tank 26, decontamination, demolition and the removal/transportation of the tanks from the Falcon Refinery to Commercial Metals (CMC recycling) in Corpus Christi, TX:

- Tank 2
- Tank X1
- Tank X2
- Tank X3
- Tank 18 - Removed from the property and recycled;
- Tank 17 -Top was removed and recycled;

#### **B. Sampling and Waste Characterization**

Water samples were collected on May 10, 2011 from Tanks 20, 2 and 27 for the purpose of submitting them for chemical analysis.

Water samples were collected from Tanks 26, 10, 30 & 7 and submitted for chemical analysis on May 20, 2011.

A water sample was conducted on Tank 26 for the purpose of characterizing the water for waste water treatment on July 26, 2011.

Preliminary sampling on Tanks 17, 18, 19, 20, 21, 22, 23, & 24 for the purpose of characterizing waste was conducted on September 9, 2011. Additional sampling for characterizing waste was conducted on September 22, 2011. Sampling results were received on September 29, 2011.



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A waste has been received from the TCEQ for the caustic material in Tank 20.

### **C. Demolition / Relocation of Structures**

A small structure was moved to facilitate access to the 8 small tanks by the shear and 18-wheeler.

## **2. PROJECT ACTIVITIES TO BE COMPLETED - (*Projected Schedule/ Established Deadlines to be developed*)**

### **A. Demolition / Relocation of Structures**

### **B. Removal of Tank Tops**

We are evaluating whether a small tank in the refinery can be removed to facilitate access and parking for the two shears and 18-wheelers. This is schedule to be addressed next week.

The following tanks are scheduled for the partial removal of the tops. The removal of tops will enable work to proceed within each tank as it will remain intact with approximately 4 to 5 feet of sidewall and floor; Removal of tank tops will continue next week for those tanks described below:

- Tank 17 – topped, removed and recycled
- Tank 18 – removed and recycled;
- Tank 19
- Tank 20
- Tank 21 - to be topped October 3, 2011
- Tank 22 - to be topped October 4, 2011
- Tank 23
- Tank 24

### **C. Removal and Transfer of sludge to Tank 26**

- Tank 27 sludge removal: This tank is currently being decontaminated.
- Tank 10 sludge removal: Activities will resume early next week with another vacuum truck.



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- Tank 17, 21, 23 & 24 sludge removal / demolition: Activities will commence as the shear completes it's work on these tanks;
- Tank 30 sludge removal: A cost proposal to complete sludge removal by October 28, 2011 has been requested from a contractor. We anticipate receiving it by October 4, 2011.
- Tank 7 sludge removal: A cost proposal to complete sludge removal by October 28, 2011 has been requested from a contractor. We anticipate receiving it by October 4, 2011.
- Tank N1 sludge removal / demolition: Currently under evaluation;
- Tank N2 sludge removal / demolition: Currently under evaluation;
- Tank Y1 sludge removal / demolition: Currently under evaluation;

#### **D. Treatment of Water in Tank 26**

We are currently waiting for a formal response from the TCEQ on their review of a waste water discharge permit that has been submitted on behalf of the Falcon Refinery. We have discovered through preliminary discussions with the TCEQ that the request for a permit has been denied by the Waste Water Program at TCEQ based on a scenario that groundwater is shallow (0 - 0.5 feet of depth) and there is an insufficient soil horizon to prevent the treated wastewater from reaching the groundwater.

We have evaluated the depth to groundwater in five auger borings at the proposed discharge area at the site. Depth of groundwater below the ground surface ranges from 7.2 to 11.1 feet of depth. We will be submitting a response to the TCEQ that supports a decision to approve the waste water permit for the treatment and discharge of water in Tank 26.

### **3. COMPLETED PROJECT ACTIVITIES FOR WEEK OF SEPTEMBER 26-30, 2011**

#### **A. Removal of Tank Bottoms**

The removal of tank bottoms from refinery tanks and the transfer of that material into Tank 26 was completed this week for the tanks that are listed below:



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Tank 27 is near completion of decontamination.

#### **B. Demolition and Recycling**

The demolition and recycling of the tanks listed below was also completed this week. The tanks were sheared, loaded into an 18- wheeler at the Falcon Refinery and transported to a recycling facility on Agnes Street in Corpus Christi, TX (Commercial Metals - CMC recycling).

- Tank 18
- Tank 17 Top

#### **C. Removal and Transfer of sludge to Tank 26**

- Tank 27: 5.5 loads (350 bbls) of sludge and wash water were transferred to Tank 26;

#### **D. Sampling and Waste Characterization**

### **4. ACTIVITIES PLANNED FOR NEXT WEEK – OCTOBER 3-7, 2011**

#### **A. Sludge Removal**

- Tank 27 – Complete decontamination and transfer wash water into Tank 26
- Tank 10 – Resume sludge removal/transfer to Tank 26;
- Tank 17- Remove and transfer pumpable liquids into Tank 26;
- Tank 21- Remove and transfer pumpable liquids into Tank 26;
- Tank 24- Remove and transfer pumpable liquids into Tank 26;

#### **B. Removal of Tank Tops & Sludge Removal**

- Begin removal of liquids from Tank 17, 20, 21, 23 & 24;
- Remove and dispose of solids from Tanks 21, 19 & 22;



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### **C. Disposal of Sludge, Metal and Sediment**

The material that includes metal and dry sediment as well as K169 listed waste that is below the universal treatment standards will be transported to and disposed at U.S. Ecology.

The liquid that exceeds the treatment standards will be transferred into Tank 26.

The waste solids and the caustic material in Tank 20 will be sent to U.S. Ecology for thermal desorption and treatment.

### **D. Demolition / Relocation of Structures**

## **5. ISSUES ENCOUNTERED**

- Tank 27 - Residual sludge is more difficult to remove and requires more time to transfer due to the significant amounts of rust and debris in the material; As the higher viscosity material is encountered, the rate of sludge that is removed and transferred into Tank 26 becomes less than optimal (3 loads removed and transferred per day).
- Tank 10 - We are planning to resume the removal and transfer sludge with a second vacuum truck to continue the removal and minimize delays.
- Treatment of Water - We continue to evaluate the groundwater conditions at the site and plan to provide a demonstration to the TCEQ in support of granting approval of the waste water permit for the treatment and discharge of water in Tank 26.
- Remaining Activities - Based on the current rate of progress, and the work that remains (especially removing sludge from Tanks 10, 30 and 7) to be performed to meet the October 28, 2011 deadline and complete the site removal action activities, additional resources (crews and vacuum trucks) are needed to accelerate and complete the removal of sludge and demolition of tanks within EPA's required schedule.
- Removal of the small Tanks N1, N2 & Y1 will be evaluated;